Exercise 1 Let f be a function defined by $f(x) = x^3$ and g be a function defined by $g(x) = \frac{1}{x^3}$. Use the pair of functions f and g to find the following values, if they exist. If the value does not exist, enter DNE.

(a)
$$(f+g)(2) = 65/8$$

(b)
$$(f-g)(-1) = \boxed{0}$$

(c)
$$(g-f)(1) = \boxed{0}$$

(d)
$$(f \cdot g) \left(\frac{1}{2}\right) = \boxed{1}$$

(e)
$$\left(\frac{f}{g}\right)(0) = \boxed{DNE}$$

(f)
$$\left(\frac{g}{f}\right)(-2) = \boxed{\frac{1}{64}}$$